

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1. (Currently amended) A computer implemented system that renders a human machine interface (HMI) rendering system, comprising the following computer executable components:
 - a processing component that analyzes information relating to a current state of parameters in connection with a human machine interface (HMI); and
 - a rendering component that automatically configures the HMI to function in accordance with a determined predefined protocol, the predefined protocol is determined based at least in part upon a zone of operation.
2. (Original) The HMI rendering system of claim 1, employed in an industrial automation environment.
3. (Canceled)
4. (Original) The system of claim 1, the processing component further comprising an artificial intelligence component that processes parameters associated with an industrial automation environment.
5. (Currently Amended) The system of claim 4, the artificial intelligence component comprises a classifier that infers a desired HMI configuration, the classifier is at least one of explicitly and implicitly trained.
6. (Canceled)
7. (Canceled)

8. (Original) The system of claim 1, the rendering component further comprising an artificial intelligence component to facilitate rendering a HMI based at least upon the predefined protocol.

9. (Currently Amended) The system of claim 8, the artificial intelligence component ~~comprises~~ determines the predefined protocol to render the HMI via a classifier.

10. (Original) The system of claim 8, the classifier is explicitly trained.

11. (Original) The system of claim 8, the classifier is implicitly trained.

12. (Currently amended) The system of claim 1, the predefined protocol also being based at least in part upon ~~zone of operation, one of a user,~~ and extrinsic data.

13. (Currently amended) The system of claim 2, wherein the predefined protocol is further based upon at least one of:

~~zones of operation;~~

type of equipment being employed;

equipment being monitored;

user proximity to the zone;

hierarchy of users within the zone;

context of the operating environment;

network conditions;

security;

security levels;

authentication; and,

priorities associated with various potential user actions.

14. (Canceled)

15. (Canceled)

16. (Currently amended) The system of claim 1, further comprising a history component that stores correctly rendered [[HMI renderings]] human machine interfaces (HMIs) for a given set of parameters.

17. (Currently amended) A computer implemented method for rendering a human machine interface (HMI), comprising:

processing information relating to a current state of parameters in connection with a human machine interface (HMI); and,

inferring a most appropriate HMI rendering protocol based at least on a zone of operation; and,

rendering a human machine interface automatically in accordance with a predefined the inferred HMI rendering protocol.

18. (Original) The method of claim 17, employed in an industrial automation environment.

19. (Canceled)

20. (Original) The method of claim 17, further comprising employing artificial intelligence techniques to facilitate processing parameters associated with an operating environment.

21. (Currently amended) The method of claim 20, further comprising determining the HMI rendering protocol by employing a classifier, the classifier is at least one of explicitly and implicitly trained.

22. (Canceled).

23. (Canceled).

24. (Currently amended) The method of claim 17, further comprising employing artificial

intelligence techniques to facilitate rendering a HMI based at least upon a predefined the HMI rendering protocol.

25. (Currently amended) The method of claim 24, further comprising correctly determining the HMI rendering protocol by employing a classifier.

26. (Currently amended) The method of claim 25, further comprising inputting correctly rendered HMIs based on industrial automation environment parameters to train training the classifier explicitly.

27. (Currently amended) The method of claim 25, further comprising monitoring correctly rendered HMIs based on industrial automation environment parameters to train training the classifier implicitly.

28. (Currently amended) The method of claim 17, further comprising employing [[a]] the HMI rendering predefined protocol based at least in part upon one of a zone of operation, user, and extrinsic data.

29. (Currently amended) The method of claim 28, employing [[a]] the HMI rendering predefined protocol further based upon at least one of:

zones of operation;

type of equipment being employed;

equipment being monitored;

user proximity to the zone;

hierarchy of users within the zone;

context of the operating environment;

network conditions;

security;

security levels;

authentication; and,

priorities associated with various potential user actions.

30. (Currently amended) The method of claim 17, further utilizing coupling a data store to the rendering component to transfer from the rendering component and store at least one of a parameter utilized, HMI rendering protocols and correctly rendered HMIs.

31. (Currently amended) The method of claim 17, further utilizing a data store to store retrieving at least one of the parameter and a parameter interrogation query from a data store coupled to the processing component.

32. (Currently amended) The method of claim 17, rendering the HMI by retrieving the HMI from employing a history component that stores correct HMI renderings for a given set of parameters.

33. (Currently amended) A computer-implemented system for rendering a human machine interface (HMI), comprising the following computer executable means:

means for processing information relating to a current state of parameters in connection with determining a zone of operation a human machine interface (HMI);

means for selecting a predefined protocol based at least upon the determined zone of operation; and

means for automatically rendering a HMI to function in accordance with [[a]] the predefined protocol.

34. (Original) The system of claim 33, employed in an industrial automation environment.

35. (Canceled)

36. (Currently amended) The system of claim 33, further comprising employing means for processing information employs artificial intelligence techniques to facilitate processing parameters associated with an operating environment.

37. (Original) The system of claim 36, further comprising employing a classifier.
38. (Original) The system of claim 37, further comprising training the classifier explicitly.
39. (Original) The system of claim 37, further comprising training the classifier implicitly.
40. (Currently amended) The system of claim 33, ~~further comprising employing means for rendering a HMI employs~~ artificial intelligence techniques to facilitate rendering a HMI based at least upon ~~a~~ the predefined protocol.
41. (Original) The system of claim 40, further comprising employing a classifier.
42. (Original) The system of claim 41, further comprising training the classifier explicitly.
43. (Original) The system of claim 41, further comprising training the classifier implicitly.
44. (Currently amended) The system of claim 33, employing a predefined protocol based at least in part upon ~~zone of operation~~, user, and extrinsic data.
45. (Currently amended) The system of claim 33[44], employing a predefined protocol further based upon at least one of:
 - ~~zones of operation;~~
 - type of equipment being employed;
 - equipment being monitored;
 - user proximity to the zone;
 - hierarchy of users within the zone;
 - context of the operating environment;
 - network conditions;
 - security;
 - security levels;
 - authentication; and,

priorities associated with various potential user actions.

46. (Currently amended) The system of claim 33, further comprising means for retrieving at least one of a parameter or parameter interrogation query from a data store utilizing a data store to store at least one parameter.

47. (Currently amended) The system of claim 33, the means for rendering further comprising utilizing a data store to store at least one of a parameters utilized, protocols employed, HMIs rendered parameter interrogation query.

48. (Original) The system of claim 33, further comprising employing a history component that stores HMI renderings.